

### Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

#### Listing of Claims

1. (canceled)

2. (currently amended) An isolated nucleic acid sequence comprising:

- a) the nucleic acid sequence of SEQ ID NO:1; ~~or~~
- b) the *sac*ABCDEFGH operon of SEQ ID NO:1; ~~or~~
- c) the *sacA*, *sacB*, *sacC*, *sacD*, *sacE*, *sacF*, *sacG*, and *sacH* genes of SEQ ID NO:1; ~~or~~
- d) ~~the~~ a nucleic acid sequence encoding the amino acid sequence SEQ ID NO: 2, 3, 4, 5, 6, 7, 8 or 9 ~~SacA, SacB, SacC, SacD, SacE, SacF, SacG, and SacH proteins (SEQ ID NO:2-9) encoded in SEQ ID NO:1; or~~
- e) ~~the~~ a nucleic acid sequence ~~which~~ that is the full complement to the sequence in a), b), c), or d).

3. (canceled)

4. (currently amended) The nucleic acid sequence ~~according to~~ of claim 2, wherein the nucleic acid sequence comprises:

- a) the nucleic acid sequence of SEQ ID NO:1; or
- b) the nucleic acid sequence which is the full complement to the sequence in a).

5-17. (canceled)

18. (previously presented) A vector comprising the nucleic acid sequence of claim 2.

19. (currently amended) The vector ~~according to~~ of claim 18 which is an expression vector.

20. (currently amended) The vector ~~according to~~ of claim 18 which is a cosmid.

21. (currently amended) A recombinant host cell of the *Pseudomonas* genus transformed with ~~one or more~~ a nucleic acid sequence[[s]] ~~according to~~ of claim 2.

22. (currently amended) A recombinant host cell of the *Pseudomonas* genus ~~comprising a~~ transformed with the vector of claim 18.

23-28. (canceled)

29. (withdrawn/currently amended) A method of producing a safracin ~~compound~~ or a safracin analogue comprising:

a) fermenting a host cell of the *Pseudomonas* genus which comprises a nucleic acid of claims 2 or 4 in a suitable culture medium and under conditions which allow cells to proliferate;

b) recovering the culture medium and

~~c) purifying the safracin or safracin analogue from the culture medium an organism in which expression of genes encoding polypeptides sufficient to direct the synthesis of a safracin or safracin analogue has been modulated by manipulation or replacement of one or more genes or sequence responsible for regulating such expression .~~

30-31. (canceled)

32. (currently amended) A composition comprising at least one nucleic acid sequence ~~according to~~ of claim 2.

33-42. (canceled)

43. (currently amended) The nucleic acid ~~according to~~ of claim 2 wherein the nucleic acid sequence comprises the *sacABCDEFGH* operon.

44-45. (canceled)

46. (currently amended) ~~The~~ An isolated nucleic acid sequence ~~according to claim 2 which comprises *sacA*, *sacB*, *sacC*, *sacD*, *sacE*, *sacF*, *sacG*, *sacH*, *sacI* and *sacJ* genes comprising both the *sacABCDEFGH* operon and the *sacIJ* operon of SEQ ID NO:1.~~

47. (canceled)

48. (currently amended) The nucleic acid ~~according to~~ of claim 46 ~~or 47~~ wherein the *sacI* gene of the sacIJ operon is disrupted.

49. (currently amended) The nucleic acid ~~according to~~ of claim 46 ~~or 47~~ wherein the *sacJ* gene of the sacIJ operon is disrupted.

50. (currently amended) The nucleic acid ~~according to~~ of claim 46 ~~or 47~~ wherein the *sacI* gene of the sacIJ operon is disrupted and the expression of the *sacJ* gene has been reconstituted.

51. (currently amended) The nucleic acid ~~according to~~ of claim 46 ~~or 47~~ wherein the *sacF* gene and/or the *sacG* gene of the sacABCDEFGH operon has been disrupted.

52. (currently amended) The nucleic acid sequence ~~according to~~ of claim 2 wherein the nucleic acid sequence comprises SEQ ID NO: 1.

53. (currently amended) An isolated nucleic acid sequence comprising:

- a) the nucleic acid sequence of SEQ ID NO:1; ~~or~~
- b) the sacABCDEFGH operon of SEQ ID NO:1; or
- c) ~~the~~ a nucleic acid sequence ~~which~~ that is the full complement to the sequence in a) or b).

54. (canceled)

55. (new) A recombinant host cell of the *Pseudomonas* genus transformed with the nucleic acid sequence of any one of claims 46, 48, 49, 50, or 51.

56. (new) A method of producing a safracin comprising:

- a) fermenting a host cell of the *Pseudomonas* genus which comprises the nucleic acid of claim 46 in a suitable culture medium and under conditions which allow cells to proliferate;
- b) recovering the culture medium and
- c) purifying the safracin from the culture medium.

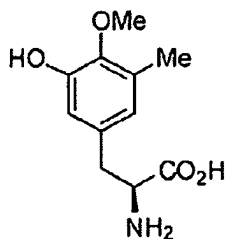
57. (new) A method of producing a safracin analogue comprising:

- a) fermenting a host cell of the *Pseudomonas* genus which comprises the nucleic acid of any one of claims 48 to 50 in a suitable culture medium and under conditions which allow cells to proliferate;
- b) recovering the culture medium; and
- c) purifying the safracin analogue from the culture medium.

58. (new) A method of producing a safracin comprising:

- a) fermenting a host cell of the *Pseudomonas* genus which comprises the nucleic acid of claim 51 in a suitable culture medium and under conditions which allow cells to proliferate;
- b) recovering the culture medium; and
- c) purifying the safracin from the culture medium;

wherein the culture medium comprises the L-Tyr derivative P2 which has the following structure:



59. (new) A method of producing a safracin analogue comprising:

- fermenting a host cell of the *Pseudomonas* genus which comprises the nucleic acid of claim 51 in a suitable culture medium and under conditions which allow cells to proliferate;
- recovering the culture medium; and
- purifying the safracin analogue from the culture medium;

wherein the culture medium comprises the L-Tyr derivative P3 which has the following structure:

